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ABSTRACT

The present invention relates to a numerically controlled machine tool for machining a large workpiece. A numerically controlled machine tool (11) according to the present invention comprises a spindle support structure (13) for moving the spindle (75) having a tool mounted thereon in directions along an X-axis, a Y-axis and a Z-axis, a workpiece support structure (15) having an indexing workpiece mounting table (99), and a chip discharge means (17) located between the spindle support structure (13) and the workpiece support structure (15) for discharging chips produced in the machining area to the outside of the machining area.

Since the workpiece mounting table (99) is allowed for rotational indexing, the setup process for the workpiece (89) can be performed with the workpiece mounting surface of the workpiece mounting table (99) facing upward, and therefore the setup process can be shortened while at the same time improving the machine operating rate. Also, since the spindle support structure (13), the workpiece support structure (15) and the chip discharge means (17) can be configured separately from each other, the machine tool can be manufactured and installed easily.

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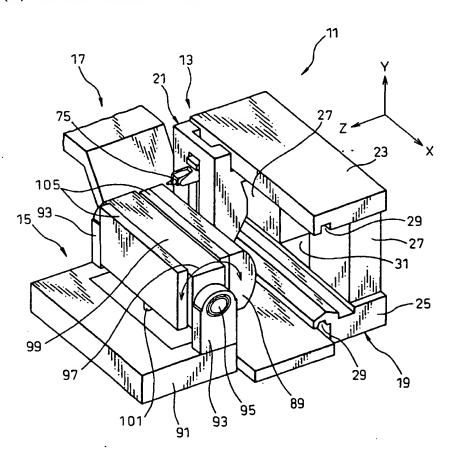
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(57) Abstract: A numerically controlled machine tool (11) for machining a large work, comprising a spindle support side structural body (13) which moves a spindle (75) to which a tool is attached in X-, Y-, and Z-directions, a work support side structural body (15) having an indexing work mounting table (99), a chips delivery means (17) which is positioned between the spindle support side structural body (13) and the work support side structural body (15) and delivers chips produced in the machining area to the outside of the machining area, whereby the work (89) setup operation can be performed with the work mounting surface of the work mounting table (99) facing upward because the work mounting table (99) is allowed to be indexed and the setup operation can be shortened and machine operation rate can be increased, and also the machine tool can be manufactured and installed easily because the spindle support side structural body (13), work support side structural body (15), and chips delivery means (17) can be configured separately from each other.

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